

### Attachment D

#### Applicable requirements for facilities subject to 40 CFR 60.640 (Subpart LLL) Standards of Performance for Onshore Natural Gas Processing: SO<sub>2</sub> Emissions [This table covers Sweetening Units (40 CFR 60.641, Definitions) utilizing Sulfur Recovery]

Unit Location	Construction, Reconstruction or Modification Date	Design Capacity (long tons(LT)/day H <sub>2</sub> S in acid gas, expressed as sulfur)	Tail gas Unit Option	Monitoring System	Effluent Gas Oxygen Content	Regulatory Requirement [Exemption]	Monitoring and Testing	Record keeping and Reporting
Not Onshore	Any	Any	N/A	N/A	N/A	None [40 CFR 60.640(c)]	None	None
Onshore	On/Before Jan. 20, 1984	Any	N/A	N/A	N/A	None [40 CFR 60.640(d)]	None	None
	After Jan.20, 1984	Cap. < 2	N/A	N/A	N/A	According to 40 CFR 60.640(b), these units only need to comply with the record keeping and Reporting requirements	None	According to 40 CFR 60.647(c), the owner or operator shall keep for the life of the facility, an analysis demonstrating that the facility's design capacity is less than 2 LT/D of H <sub>2</sub> S expressed as sulfur.
		2 ≤ Cap. < 150	None	N/A	< 1.0%	40 CFR 60.642, Standards for sulfur dioxide applies. If initial performance testing required by 40 CFR 60.8 is not done, see Section G (Compliance Schedule) of this General Permit.		Records of calculations and measurements required in 40 CFR 60.642(a) and (b) and 60.646 (a) through (g) must be retained for at least 2 years following the date of the measurements. A written report of excess emissions as defined in 40 CFR 60.647(b)(1) shall be submitted to the administrator semiannually.

**Attachment D (Continued)**

**Applicable requirements for facilities subject to 40 CFR 60.640 (Subpart LLL) Standards of Performance for Onshore Natural Gas Processing:  
SO<sub>2</sub> Emissions [This table covers Sweetening Units (40 CFR 60.641, Definitions) utilizing Sulfur Recovery]**

Unit Location	Construction, Reconstruction or Modification Date	Design Capacity (long tons(LT)/day H <sub>2</sub> S in acid gas, expressed as sulfur)	Tail gas Unit Option	Monitoring System	Effluent Gas Oxygen Content	Regulatory Requirement [Exemption]	Monitoring and Testing	Record keeping and Reporting
			Oxidation Type	Continuous Emissions Monitor (CEM)	N/A	40 CFR 60.642, Standards for sulfur dioxide applies.  If initial performance testing required by 40 CFR 60.8 is not done, see Section G (Compliance Schedule) of this General Permit.	To Comply with sulfur dioxide Standards specified in 40 CFR 60.642, see 40 CFR 60.643.  For Testing methods and procedures, see 40 CFR 60.644(a), (b), (c)(1)-(3) and 40 CFR 60.644(c)(4), (i), (iii), (iv),(d).  For Monitoring of emissions and operations, see 40 CFR 60.646(a), (b),(d),(f),(g)  See 40 CFR 60.648, for optional procedure for measuring hydrogen sulfide in acid gas	Records of calculations and measurements required in 40 CFR 60.642(a) and (b) and 60.646 (a) through (g) must be retained for at least 2 years following the date of the measurements. A written report of excess emissions as defined in 40 CFR 60.647(b) shall be submitted to the administrator semiannually.
Onshore (Continued)	After Jan.20, 1984 (Continued)	$2 \leq \text{Cap.} < 150$ (Continued)	Oxidation Type (Continued)	None	N/A	40 CFR 60.642, Standards for sulfur dioxide applies.  If initial performance testing required by 40 CFR 60.8 is not done, see Section G (Compliance Schedule) of this General Permit.	To Comply with sulfur dioxide Standards specified in 40 CFR 60.642, see 40 CFR 60.643.  For Testing methods and procedures, see 40 CFR 60.644(a), (b), (c)(1)-(3) and 40 CFR 60.644(c)(4), (i), (iii), (iv).  For Monitoring of emissions and operations, see 40 CFR 60.646(a), (e)  See 40 CFR 60.648, for optional	Records of calculations and measurements required in 40 CFR 60.642(a) and (b) and 60.646 (a) through (g) must be retained for at least 2 years following the date of the measurements. A written report of excess emissions as defined in 40 CFR 60.647(b) shall be submitted to the administrator semiannually. For sources with design capacity of less than 150 LT/D shall keep records for the life of the facility, a record demonstrating that the facility's design capacity is less than 150 LT/D of H <sub>2</sub> S

**Attachment D (Continued)**

**Applicable requirements for facilities subject to 40 CFR 60.640 (Subpart LLL) Standards of Performance for Onshore Natural Gas Processing:  
SO<sub>2</sub> Emissions [This table covers Sweetening Units (40 CFR 60.641, Definitions) utilizing Sulfur Recovery]**

Unit Location	Construction, Reconstruction or Modification Date	Design Capacity (long tons(LT)/day H <sub>2</sub> S in acid gas, expressed as sulfur)	Tail gas Unit Option	Monitoring System	Effluent Gas Oxygen Content	Regulatory Requirement [Exemption]	Monitoring and Testing	Record keeping and Reporting
							procedure for measuring hydrogen sulfide in acid gas	expressed as sulfur.
			Reduction Type followed by incinerator	CEM	N/A	40 CFR 60.642, Standards for sulfur dioxide applies.  If initial performance testing required by 40 CFR 60.8 is not done, see Section G (Compliance Schedule) of this General Permit.	To Comply with sulfur dioxide Standards specified in 40 CFR 60.642, see 40 CFR 60.643.  For Testing methods and procedures, see 40 CFR 60.644(a), (b), (c)(1)-(3) and 40 CFR 60.644(c)(4), (i), (ii), (iv), (d).  For Monitoring of emissions and operations, see 40 CFR 60.646(a), (b), (d), (f), (g)  See 40 CFR 60.648, for optional procedure for measuring hydrogen sulfide in acid gas	Records of calculations and measurements required in 40 CFR 60.642(a) and (b) and 60.646 (a) through (g) must be retained for at least 2 years following the date of the measurements. A written report of excess emissions as defined in 40 CFR 60.647(b) shall be submitted to the administrator semiannually.
Onshore (Continued)	After Jan.20, 1984 (Continued)	2 ≤ Cap. < 150 (Continued)	Reduction Type followed by Incinerator (Continued)	None	N/A	40 CFR 60.642, Standards for sulfur dioxide applies.  If initial performance testing required by 40 CFR 60.8 is not done, see Section G (Compliance Schedule) of this General Permit.	To Comply with sulfur dioxide Standards specified in 40 CFR 60.642, see 40 CFR 60.643.  For Testing methods and procedures, see 40 CFR 60.644(a), (b), (c)(1)-(3) and 40 CFR 60.644(c)(4), (i), (ii), (iv)  For Monitoring of emissions and operations, see 40 CFR 60.646(a), (e)	Records of calculations and measurements required in 40 CFR 60.642(a) and (b) and 60.646 (a) through (g) must be retained for at least 2 years following the date of the measurements. A written report of excess emissions as defined in 40 CFR 60.647(b)(1) shall be submitted to the administrator semiannually. For sources with design capacity of less than 150 LT/D shall keep records for the life of the facility, a record

**Attachment D (Continued)**

**Applicable requirements for facilities subject to 40 CFR 60.640 (Subpart LLL) Standards of Performance for Onshore Natural Gas Processing:  
SO<sub>2</sub> Emissions [This table covers Sweetening Units (40 CFR 60.641, Definitions) utilizing Sulfur Recovery]**

Unit Location	Construction, Reconstruction or Modification Date	Design Capacity (long tons(LT)/day H <sub>2</sub> S in acid gas, expressed as sulfur)	Tail gas Unit Option	Monitoring System	Effluent Gas Oxygen Content	Regulatory Requirement [Exemption]	Monitoring and Testing	Record keeping and Reporting
							See 40 CFR 60.648, for optional procedure for measuring hydrogen sulfide in acid gas	demonstrating that the facility's design capacity is less than 150 LT/D of H <sub>2</sub> S expressed as sulfur.
			Reduction Type without Incinerator	CEM	N/A	40 CFR 60.642, Standards for sulfur dioxide applies.  If initial performance testing required by 40 CFR 60.8 is not done, see Section G (Compliance Schedule) of this General Permit.	To Comply with sulfur dioxide Standards specified in 40 CFR 60.642, see 40 CFR 60.643.  For Testing methods and procedures, see 40 CFR 60.644(a), (b), (c)(1)-(3) and 40 CFR 60.644(c)(4), (i), (ii), (iv), (d).  For Monitoring of emissions and operations, see 40 CFR 60.646(a), (c), (d), (f), (g)  See 40 CFR 60.648, for optional procedure for measuring hydrogen sulfide in acid gas	Records of calculations and measurements required in 40 CFR 60.642(a) and (b) and 60.646 (a) through (g) must be retained for at least 2 years following the date of the measurements. A written report of excess emissions as defined in 40 CFR 60.647(b)(1) shall be submitted to the administrator semiannually.
Onshore (Continued)	After Jan.20, 1984 (Continued)	2 ≤ Cap. < 150 (Continued)	Reduction Type without Incinerator (Continued)	None	N/A	40 CFR 60.642, Standards for sulfur dioxide applies.  If initial performance testing required by 40 CFR 60.8 is not done, see Section G (Compliance Schedule) of this General Permit.	To Comply with sulfur dioxide Standards specified in 40 CFR 60.642, see 40 CFR 60.643.  For Testing methods and procedures, see 40 CFR 60.644(a), (b), (c)(1)-(3) and 40 CFR 60.644(c)(4), (i), (ii), (iv).  For Monitoring of emissions and	Records of calculations and measurements required in 40 CFR 60.642(a) and (b) and 60.646 (a) through (g) must be retained for at least 2 years following the date of the measurements. A written report of excess emissions as defined in 40 CFR 60.647(b)(1) shall be submitted to the administrator semiannually. For sources with design capacity of less

**Attachment D (Continued)**

**Applicable requirements for facilities subject to 40 CFR 60.640 (Subpart LLL) Standards of Performance for Onshore Natural Gas Processing:  
SO<sub>2</sub> Emissions [This table covers Sweetening Units (40 CFR 60.641, Definitions) utilizing Sulfur Recovery]**

Unit Location	Construction, Reconstruction or Modification Date	Design Capacity (long tons(LT)/day H <sub>2</sub> S in acid gas, expressed as sulfur)	Tail gas Unit Option	Monitoring System	Effluent Gas Oxygen Content	Regulatory Requirement [Exemption]	Monitoring and Testing	Record keeping and Reporting
							operations, see 40 CFR 60.646(a), (e)  See 40 CFR 60.648, for optional procedure for measuring hydrogen sulfide in acid gas	than 150 LT/D shall keep records for the life of the facility, a record demonstrating that the facility's design capacity is less than 150 LT/D of H <sub>2</sub> S expressed as sulfur.
		Cap. $\geq$ 150	None	N/A	< 1.0%	40 CFR 60.642, Standards for sulfur dioxide applies. If initial performance testing required by 40 CFR 60.8 is not done, see Section G (Compliance Schedule) of this General Permit.	To Comply with sulfur dioxide Standards specified in 40 CFR 60.642, see 40 CFR 60.643.  For Testing methods and procedures, see 40 CFR 60.644(a), (b), (c)(1)-(3) and 40 CFR 60.644(c)(4), (i), (ii), (iv).  For Monitoring of emissions and operations, see 40 CFR 60.646(a)  See 40 CFR 60.648, for optional procedure for measuring hydrogen sulfide in acid gas	Records of calculations and measurements required in 40 CFR 60.642(a) and (b) and 60.646 (a) through (g) must be retained for at least 2 years following the date of the measurements. A written report of excess emissions as defined in 40 CFR 60.647(b) shall be submitted to the administrator semiannually.
Onshore (Continued)	After Jan.20, 1984 (Continued)	Cap. $\geq$ 150 (Continued)	None (Continued)	N/A (Continued)	> 1.0%	40 CFR 60.642, Standards for sulfur dioxide applies.  If initial performance testing required by 40 CFR 60.8 is not done, see Section G (Compliance Schedule) of this General Permit.	To Comply with sulfur dioxide Standards specified in 40 CFR 60.642, see 40 CFR 60.643.  For Testing methods and procedures, see 40 CFR 60.644(a), (b), (c)(1)-(3) and 40 CFR 60.644(c)(4), (i), (iii), (iv).	Records of calculations and measurements required in 40 CFR 60.642(a) and (b) and 60.646 (a) through (g) must be retained for at least 2 years following the date of the measurements. A written report of excess emissions as defined in 40 CFR 60.647(b)(1) shall be submitted to the

**Attachment D (Continued)**

**Applicable requirements for facilities subject to 40 CFR 60.640 (Subpart LLL) Standards of Performance for Onshore Natural Gas Processing:  
SO<sub>2</sub> Emissions [This table covers Sweetening Units (40 CFR 60.641, Definitions) utilizing Sulfur Recovery]**

Unit Location	Construction, Reconstruction or Modification Date	Design Capacity (long tons(LT)/day H <sub>2</sub> S in acid gas, expressed as sulfur)	Tail gas Unit Option	Monitoring System	Effluent Gas Oxygen Content	Regulatory Requirement [Exemption]	Monitoring and Testing	Record keeping and Reporting
							For Monitoring of emissions and operations, see 40 CFR 60.646(a)  See 40 CFR 60.648, for optional procedure for measuring hydrogen sulfide in acid gas	administrator semiannually.
			Oxidation Type	CEM	N/A	40 CFR 60.642, Standards for sulfur dioxide applies.  If initial performance testing required by 40 CFR 60.8 is not done, see Section G (Compliance Schedule) of this General Permit.	To Comply with sulfur dioxide Standards specified in 40 CFR 60.642, see 40 CFR 60.643.  For Testing methods and procedures, see 40 CFR 60.644(a), (b), (c)(1)-(3) and 40 CFR 60.644(c)(4), (i), (iii), (iv), (d).  For Monitoring of emissions and operations, see 40 CFR 60.646(a), (b), (d), (f), (g)  See 40 CFR 60.648, for optional procedure for measuring hydrogen sulfide in acid gas	Records of calculations and measurements required in 40 CFR 60.642(a) and (b) and 60.646 (a) through (g) must be retained for at least 2 years following the date of the measurements. A written report of excess emissions as defined in 40 CFR 60.647(b) shall be submitted to the administrator semiannually.
			Reduction Type followed by incinerator	CEM	N/A	40 CFR 60.642, Standards for sulfur dioxide applies.  If initial performance testing required by 40 CFR 60.8 is not done, see Section G	To Comply with sulfur dioxide Standards specified in 40 CFR 60.642, see 40 CFR 60.643.  For Testing methods and procedures, see 40 CFR	Records of calculations and measurements required in 40 CFR 60.642(a) and (b) and 60.646 (a) through (g) must be retained for at least 2 years following the date of the measurements. A written report of

**Attachment D (Continued)**

**Applicable requirements for facilities subject to 40 CFR 60.640 (Subpart LLL) Standards of Performance for Onshore Natural Gas Processing:  
SO<sub>2</sub> Emissions [This table covers Sweetening Units (40 CFR 60.641, Definitions) utilizing Sulfur Recovery]**

<b>Unit Location</b>	<b>Construction, Reconstruction or Modification Date</b>	<b>Design Capacity</b> (long tons(LT)/day H <sub>2</sub> S in acid gas, expressed as sulfur)	<b>Tail gas Unit Option</b>	<b>Monitoring System</b>	<b>Effluent Gas Oxygen Content</b>	<b>Regulatory Requirement [Exemption]</b>	<b>Monitoring and Testing</b>	<b>Record keeping and Reporting</b>
						(Compliance Schedule) of this General Permit.	60.644(a), (b), (c)(1)-(3) and 40 CFR 60.644(c)(4), (i), (ii), (iv), (d).  For Monitoring of emissions and operations, see 40 CFR 60.646(a), (b), (d), (f), (g)  See 40 CFR 60.648, for optional procedure for measuring hydrogen sulfide in acid gas	excess emissions as defined in 40 CFR 60.647(b) shall be submitted to the administrator semiannually.
			Reduction Type without Incinerator	CEM	N/A	40 CFR 60.642, Standards for sulfur dioxide applies.  If initial performance testing required by 40 CFR 60.8 is not done, see Section G (Compliance Schedule) of this General Permit.	To Comply with sulfur dioxide Standards specified in 40 CFR 60.642, see 40 CFR 60.643.  For Testing methods and procedures, see 40 CFR 60.644(a), (b), (c)(1)-(3) and 40 CFR 60.644(c)(4), (i), (ii), (iv), (d).  For Monitoring of emissions and operations, see 40 CFR 60.646(a), (c), (d), (f), (g)  See 40 CFR 60.648, for optional procedure for measuring hydrogen sulfide in acid gas	Records of calculations and measurements required in 40 CFR 60.642(a) and (b) and 60.646 (a) through (g) must be retained for at least 2 years following the date of the measurements. A written report of excess emissions as defined in 40 CFR 60.647(b)(1) shall be submitted to the administrator semiannually.

**Attachment D (Continued)**

**Applicable requirements for facilities subject to 40 CFR 60.640 (Subpart LLL) Standards of Performance for Onshore Natural Gas Processing:  
SO<sub>2</sub> Emissions [This table covers Sweetening Units (40 CFR 60.641, Definitions) utilizing Sulfur Recovery]**

**The following are the applicable requirements according to 40 CFR 60, Sub part LLL, for Natural Gas Transmission Stations that have Sweetening Units (40 CFR 60.641, Definitions) Not Utilizing Sulfur Recovery**

Unit Location	Is Acid Gas Completely Rejected into Oil or Gas Bearing Strata or Otherwise Not Vented	Construction, Modification, or Reconstruction Date	Design Capacity (long tons/day H <sub>2</sub> S in acid gas, expressed as sulfur)	Regulatory Requirement [Exemption]	Monitoring and Testing	Record keeping and Reporting
Territorial Seas	N/A	Any	Any	None [40 CFR 60.640(c)]	None	None
Other	Yes	Any	Any	None [40 CFR 60.640(e)]	None	None
	No	Before January 20, 1984	Any	None [40 CFR 60.640(d)]	None	None
		After January 20, 1984	Cap. < 2	According to 40 CFR 60.640(b), these units only need to comply with the record keeping and Reporting requirements	None	According to 40 CFR 60.647(c), the owner or operator shall keep for the life of the facility, an analysis demonstrating that the facility's design capacity is less than 2 LT/D of H <sub>2</sub> S expressed as sulfur.